

**UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF TEXAS  
MIDLAND/ODESSA DIVISION**

COBBLESTONE WIRELESS, LLC,

Plaintiff,

v.

APPLE INC.,

Defendant.

NO. 7:24-cv-00232-ADA

JURY TRIAL DEMANDED

**DEFENDANT APPLE INC.'S  
CLAIM CONSTRUCTION REPLY BRIEF**

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# **I. U.S. PATENT NO. 7,924,802**

## **A. “[first/second] center frequency” (claims 1-2, 10)**

As Apple explained (Brief (Dkt. 32) at 1-4) and as Cobblestone ignored, the Eastern District of Texas already rejected the same arguments that Cobblestone repeats here, construing the ’802 patent’s “center frequency” terms to have their plain and ordinary meaning. *Cobblestone Wireless, LLC v. Cisco Sys., Inc.*, No. 2:23-cv-00454-JRG-RSP, Slip Op. at 8, 12 (E.D. Tex. Sept. 29, 2023) (“*Cisco* Claim Construction Order”). Cobblestone’s heavy reliance here on extrinsic evidence does not overcome that well-reasoned ruling. Indeed, Cobblestone’s brief consists mainly of large block quotes from an expert declaration submitted in a prior case, and Cobblestone relies on that extrinsic evidence as the primary basis for its claim construction argument. *See* Response at 2-7.

Cobblestone’s brief, moreover, does not mention, let alone dispute, Apple’s arguments that:

- Claim terms should generally be accorded their ordinary and customary meaning. *Id.* (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005); *Aventis Pharms. Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013)).
- The “first center frequency” and “second center frequency” terms are comprised of terms with readily apparent meanings. Brief at 1.
- Disclaimer and lexicography are the two exceptions to giving a claim term its plain and ordinary meaning. *Id.* at 1-2 (citing *Thorner v. Sony Comput. Ent. AM. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)).
- Patentee did not disclaim anything from the scope of the “center frequency” terms, and the intrinsic record includes no remarks concerning the terms’ claim scope. *Id.* at 2.
- Patentee did not act as its own lexicographer by defining “center frequency” as “the frequency of the carrier that a baseband signal is up-converted to.” *Id.*

Nor does Cobblestone address Apple’s arguments regarding the infirmities in Cobblestone’s proposed constructions (i.e., “the frequency of the carrier that the baseband signal is upconverted to”). Specifically:

- The patent does not use the term “baseband signal.” *Id.*

- The patent recites up-conversion in some claims (including the asserted claims) that recite “center frequency,” but omits that requirement in other claims reciting “center frequency.” *Id.* at 2-3.
- It would have been unnecessary to explicitly specify in some claims that a center frequency is the result of “up-converting” a signal if the “center frequency” term already referred to the frequency of the carrier that the baseband signal is up-converted to. *Id.* at 3.

Cobblestone’s failure to address and rebut these arguments dooms its proposed constructions. And having failed to dispute these issues in its responsive brief, Cobblestone has waived its right to dispute them later, including in its sur-reply. *See Liberty Mut. Fire Ins. Co. v. Fowlkes Plumbing, LLC*, 850 F. App’x 213, 217 (5th Cir. 2021) (“[A] new argument cannot be raised for the first time in a reply brief, let alone a sur-reply.”); *ALSI Holdings, LLC v. Current Lighting Sols., LLC*, No. 6:21-cv-01187-ADA, 2022 WL 3702268, at \*5 (W.D. Tex. Aug. 26, 2022) (refusing to resolve an issue first raised in a party’s sur-sur-reply); *Parkis v. State Farm Lloyds*, No. 17-CV-00200-DC, 2018 WL 11195493, at \*3 (W.D. Tex. Dec. 15, 2018) (“Legal arguments raised for the first time in a surreply . . . are waived.” (quoting *Branch v. CEMEX, Inc.*, No. H-11-19, 2012 WL 2357280, at \*9 (S.D. Tex. June 20, 2012))); *Carter v. Cnty. of Hays*, No. AU-17-CA-00691-SS, 2019 WL 436556, at \*7 n.8 (W.D. Tex. Feb. 4, 2019) (same).

Cobblestone’s only response to Apple’s opening brief is to argue that up-converting baseband signals to center frequencies is “consistent” with the ’802 patent specification’s usage of “center frequency.” Response at 1-2. But Cobblestone’s argument that every embodiment is “consistent” with up-converting baseband signals to center frequencies does not support a redefinition of “center frequency.” *See id.* at 2-6. Indeed, nowhere does the patent define or limit “center frequency” to require up-conversion from a baseband signal. And contrary to Cobblestone’s assertion, the patent discloses embodiments in which center frequencies are *not* the

result of up-converting a baseband signal. *See* '802 patent, 8:56-61 (disclosing up-converting signals to “RF center frequencies” from “intermediate frequencies”).

Nor does Cobblestone’s argument that the specification’s “interchangeable[]” use of “center frequency” and “carrier frequency” to describe one (but not all) of the disclosed embodiments support a redefinition of “center frequency.” *See* Response 6-7. Specifically, Cobblestone points to a single embodiment that describes transmitting data signals with two different center frequencies over “two different carrier frequencies,” and cites inapposite case law addressing whether separate claim terms are interchangeable.<sup>1</sup> *Id.* But, in doing so, Cobblestone argues that the broader “center frequency” claim term is interchangeable with the narrower “carrier frequency” term of just one specification embodiment, not in the claims. There is no basis to limit the claims in that way.

Cobblestone previously raised the same arguments in the *Cisco* case, where they were correctly rejected. The Eastern District of Texas held that the patent’s use of “center frequency” in the specification does not provide “implicit definition” of the term to mean “the carrier frequency to which the baseband signal is upconverted.” *Cisco* Claim Construction Order at 8 (citing *Ethicon LLC v. Intuitive Surgical, Inc.*, No. 2020-1528, 2021 WL 3716397, at \*4 (Fed. Cir. 2021)). Nothing dictates a different result here. As the Federal Circuit has repeatedly explained,

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<sup>1</sup> Cobblestone cites three cases that address whether claim terms are interchangeable. *See Baran v. Med. Device Techs., Inc.*, 616 F.3d 1309, 1313, 1316 (Fed. Cir. 2010) (finding that the asserted claim terms, “detachable” and “releasably,” have the same meaning), *Virnetx, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1317-19 (Fed. Cir. 2014) (finding that the claim terms, “secure communication link” and “VPN,” should be construed consistently), and *Haddad v. United States*, 164 Fed. Cl. 28, 66 (2023) (finding that the claim terms “authenticity risk rating,” “authentication rating,” and “ID forgery risks rating” are used interchangeably). Response at 6. The cases address only whether different claim terms have the same meaning, not whether a claim term has the same meaning as a term that is used in only one specification embodiment. None of the '802 patent claims recites “carrier” or “carrier frequency.”

“[i]t is [] not enough that the only embodiments, or all of the embodiments, contain a particular limitation. We do not read limitations from the specification into claims; we do not redefine words. Only the patentee can do that.” *Thorner*, 669 F.3d at 1366-77.<sup>2</sup>

Accordingly, Cobblestone cannot show that these terms should be construed as anything other than according to their plain and ordinary meaning.

## II. U.S. PATENT NO. 8,891,347

### A. “predistorted” (’347 patent, claim 19)

Cobblestone does not dispute that “predistorted” refers to distortion *before* transmission. Response at 10 (“‘pre-distortion’ occurs *before* transmission”), 11-12 (“Cobblestone agrees ‘predistortion’ requires action... *before* transmission”). Despite this, Cobblestone’s “plain meaning” construction does not require that distortion happen *before* transmission and, confusingly, address only what happens *after* transmission.

Cobblestone’s brief also appears to argue that the only distortion within the meaning of the term is “pseudo-distortion” (Response at 11), yet Cobblestone’s proposed construction is not limited to “pseudo-distortion.” Regardless, Cobblestone’s argument makes no sense: the ’347 patent does not require “pseudo-distortion” either through lexicography or disclaimer. In fact, Cobblestone admits that the language it relies on for its narrowing proposal is “not quite definitional.” *Id.*

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<sup>2</sup> Cobblestone’s reliance on *In re Abbott Diabetes Care Inc.*, 696 F.3d 1142 (Fed. Cir. 2012) to argue that this Court should import the concept of up-converting a baseband signal from the specification into the claims is misplaced. See Response at 8-9. In finding that the disputed “electrochemical sensor” term should be construed to exclude wired sensors, *Abbott* did not consider only whether the specification’s use of the term was limited to wireless sensors, but also the specification’s consistent disparaging remarks about wired sensors. See *id.* at 1148-49. Here, as discussed above, the ’802 patent does not disparage the ordinary meaning of “center frequency” and even discloses embodiments that are inconsistent with Cobblestone’s more limiting definition.



As Apple explains in its Opening Brief, the '347 patent includes language disclaiming the use of precoding using a “codebook” when performing predistortion. Brief at 6. This disclaimer language notes a “significant difference” between the invention described in the '347 patent and “conventional precoding techniques.” *Id.* Cobblestone’s argument that the language relied on by Apple for disclaimer is simply a “vague criticism of the codebook prior art” (Response at 12) is contradicted by Cobblestone’s admissions that this language specifically describes how “the invention” is “in contrast to” other known techniques. In particular, Cobblestone admits that the '347 patent’s statement that “[t]he systems and methods described herein can make use of the concept of ‘pre-distortion,’ which has significant difference from the conventional precoding techniques” is a comparison of “other known techniques in relation to *the invention*.” Response at 10. This language is not followed by simple “criticism” of the use of codebooks, but rather by an explanation of the “significant difference” between the invention and “other known techniques [e.g., codebooks] in relation to *the invention*.” Response at 10. Specifically, the '347 patent makes clear that the conventional techniques “make use of simplified representations of channel, e.g. in terms of code-book,” while the invention “make[s] use of the parameters of the propagation channel, e.g. the delay, Doppler frequencies, directions of departure and directions of arrival.” '347, 11:59-67.

As Cobblestone admits, the specification language explains the “contrast” between the invention and the conventional techniques (Response at 10)—this is disclaimer. *See David Netzer Consulting Eng’r LLC v. Shell Oil Co.*, 824 F.3d 989, 995 (Fed. Cir. 2016) (finding disclaimer when “the patentee distinguished conventional extraction from fractionation in the specification, indicating that ‘fractionation’ does not include conventional extraction”); *Luminara Worldwide, LLC v. Liown Elecs. Co.*, 814 F.3d 1343, 1354 (Fed. Cir. 2016) (finding disclaimer of artificial

candle flames with “rhythmic or metronomic” movements where the specification distinguishes flames driven by “real but chaotic” movements over prior art candles with rhythmic movements). Thus, the patent makes clear that the invention uses a predistortion technique that excludes the codebooks used in conventional techniques.

Cobblestone’s reliance on *Micro Chemical* and *Honeywell* to argue that the patent does not disclaim precoding using a codebook is misplaced. In *Micro Chemical*, the Federal Circuit found no disclaimer from a mere comparison between “the preferred embodiment” (not, like here, the invention itself) and other approaches described in the patent. *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1260 (Fed. Cir. 1999). Similarly, unlike here, in *Honeywell*, there was no comparison of the invention (or all embodiments of the invention) to an alternative approach. *Honeywell Inc. v. Victor Co. of Japan*, 298 F.3d 1317, 1325-26 (Fed. Cir. 2002).

Cobblestone argues incorrectly that *SciMed* is inapplicable. Cobblestone focuses on the fact that, in *SciMed*, the specification referred to “all embodiments of the present invention,” and points out that this same phrase does not appear in the ’347 patent specification. Response at 14. But the Federal Circuit did not create a bright-line rule about particular wording needed for disclaimer. Instead, the court’s analysis focused on the patentee’s clear intent. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1341 (Fed. Cir. 2001) (“Where the specification makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent...”). Here, Cobblestone admits patentee’s clear intent: by referring to “[t]he systems and methods described herein,” patentee is referring to “the invention.” Response at 10. And the patent then goes on to explain that there is a “significant difference” between (1) that invention and (2) precoding using codebooks, further

explaining that the approach utilized by the alleged invention (i.e., that excludes the use of codebooks) “can be much more accurate.” 11:67-12:2.<sup>3</sup>

Similarly, there is no merit to Cobblestone’s argument that *Gaus* is inapplicable. *See* Response at 14-15. In particular, Cobblestone argues that “[a] section generally about the deficiencies of prior techniques is not comparable to an explanation that the prior art does one thing, e.g., cause a shock, that the invention categorically prevents.” Response at 15. The section that Apple relies on, however, is not about mere “deficiencies of prior techniques,” but rather about the “significant difference” between conventional techniques on the one hand and “[t]he systems and methods described herein” (i.e., what Cobblestone admits is “*the invention*”) of the ’347 patent on the other.

Finally, Cobblestone does not attempt to distinguish *David Netzer*, but instead incorrectly attempts to argue that this case is not about disclaimer of prior art. Response at 14 n.3. But as Apple explained (Br. at 7), there the Federal Circuit determined that the patent at issue “disclaimed conventional extraction.” *David Netzer*, 824 F.3d at 996; *see also id.* at 995 (“[T]he patentee clearly disclaimed conventional extraction.”). The disclaimer in *David Netzer* was obtained by simply distinguishing the prior art techniques, which the Federal Circuit held was sufficient for the patentee to indicate what the invention “does not include,” just as the ’347 patent’s distinguishing of conventional codebook techniques indicates what the ’347 patent’s invention does not include. Br. at 6-7.

Accordingly, “predistorted” should be construed to mean “distorted before transmission, not including precoding using a codebook,” as Apple proposes.

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<sup>3</sup> As Apple explains in its opening brief, this disclosure confirms that *predistortion* is distinct from *precoding* using a “codebook.” Brief at 6.

**B. “path parameter information” (’347 patent, claims 19-22)**

Cobblestone’s argument that “path parameter information” should not be construed as “estimated parameters of the propagation path” is belied both by its agreement that “path parameter information” relates to information about a propagation path and by its concession that it “includes estimated parameters of the propagation path.” Response at 15.

Cobblestone argues incorrectly that limiting “path parameter information” to “estimated parameters of the propagation path” reads the term out of the claim. Response at 15. But Cobblestone does not attempt to explain how Apple’s proposed construction would remove the claim term from the claim. In particular, Cobblestone suggests—without explanation—that Apple’s construction effectively amends the claim as follows: “performing a channel estimation based on the first signal to obtain path parameter information of the first propagation path; sending the channel estimation that includes the path parameter information to the transmitter.” Not so. In fact, the removal of the identified language *contradicts* Apple’s proposed construction, because removal would mean that any channel estimation wholly unrelated to the estimated parameters of the propagation paths could be used.

Cobblestone also argues incorrectly that the same language in the specification cannot support disclaimer for two different limitations. *See* Response at 16. First, Cobblestone cites no case in support of this proposition. And, second, this key language does exactly that, making clear that (1) predistortion is used instead of conventional precoding techniques and (2) the path parameter information in “the invention” is used (instead of a code-book) to achieve the predistortion:

*“The systems and methods described herein [the invention] can make use of the concept of “pre-distortion,” which has significant difference from the conventional precoding techniques. The latter can make use of simplified representations of channel, e.g. in terms of code-book, while the system and methods described above*

***[the invention] make use of the parameters of the propagation channel***, e.g. the delay, Doppler frequencies, directions of departure and directions of arrival.”

’347 patent, 11:59-67. Disclaimer applies to the full scope of the invention, and not just to individual limitations. *See SciMed*, 242 F.3d at 1341 (“Where the specification makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent....”). The disclaimer language of the ’347 patent applies broadly to the claim language, across multiple limitations.

Cobblestone again attempts incorrectly to distinguish *SciMed* on the ground that the ’347 patent does not contain the words “all embodiments of the invention.” Response at 16. But as Cobblestone admits (Response at 10), the language relied on by Apple for disclaimer is describing a “significant difference” between “the invention” of the ’347 patent and “other known techniques.” *See David Netzer*, 824 F.3d at 995; *Oilfield Equip. Mktg., Inc. v. New Tech Sys., Inc.*, No. MO-02-CA-183, 2006 WL 8436327, at \*5-6 (W.D. Tex. June 22, 2006) (finding disclaimer of analog signal processing elements where the specification describes its inventive signal processing techniques as a “significant[]” improvement over existing analog signal processing techniques (quoting U.S. Pat. No. 5,671,155 at 2:21-26)).

Cobblestone also incorrectly argues that the language cited by Apple is not disclaimer because it does not explicitly refer to “path parameter information,” and refers instead to “parameters of the propagation channel.” Response at 16. But Cobblestone admits (and even concedes it is “obvious” from the claims) that “path parameter information” includes “estimated parameters of the propagation path.” Response at 15.

Accordingly, the Court should construe “path parameter information” to mean “estimated parameters of the propagation path, excluding simplified representations of a channel (e.g. in terms of a codebook),” as Apple proposes.

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**CERTIFICATE OF SERVICE**

The undersigned hereby certifies a true-and-correct copy of the foregoing document was served via the Court's CM/ECF system on all counsel of record on this June 13, 2025.

/s/ Kevin J. Post

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